LACANA MINING INC: DRILL LOG _____ DRILL HOLE NO. R6E-8

PROPERTY GILT EDGE STATE S.D. CO. LAWRENCE QUAD DEADWOOD SOUTH

SEC ___ T 4N R 4E CLAIM _____ COORDINATES: (N) (S) 747,563 (E) (W) 1,126,826

CONTRACTOR LANG / PETER HELPER TONY MARTY SAMPLER MW / RJM / RW LOGGER MW - RM

TYPE DRILLING REV. CIRC. TYPE DRILL TRACK MOUNTED COLLAR ELEVATION 5503 FT.

BEARING — INCLINATION Vert TOTAL DEPTH 350' HOLE DIAMETER 5 3/4"

CASING 21'-6" BOTTOM ELEVATION _____ WATER LEVEL _____

SAMPLE DISPOSITION _____ SUMMARY _____ COST/HR _____ COST/FT $8.00

SHEET 1 OF 6 DATES: START 7/15 COMP. 7/17

TIME: START _____ COMP. _____

MOVING TIME: START 1/4 HR COMP _____

STANDBY TIME: START — COMP _____

TOTAL HOURS DRILLED 15 1/2 HOURS COST _____

BIT COST _____ TOTAL COST _____

no.	Footage	Drill Rec.	Walls	Wetness	Min.	Color Dry	Color Washed	Wash Rec. %	Clay%	$CaCO_3$ %	FeOx %	Vein Quartz	Silicification	Sulfide	Rock Type	Geology	Assayed	SILVER VALLEY OPT Au	Ag	Au	Ag	Au	Ag	Remarks:	
1	5			DRY		WET ↓	LT YEL-OR-YEL TO MOD. BR.	75	2-5%	NIL	GRY OR MOD OR MOD TAN				0-1 FT. FILL 1-32 FT. HB DIO. PORPH			.004						0-25 HIGHLY FRAC.	1-32 FT. HB DIORITE PORPH.
																								MAJ. SURF. OXID. EXISTS 23 FT.	
2	10			DRY			SAB	75	1-2%	"	SAB							.006						MOD. OXID. TO 26 FT.	
3	15			DRY			SAB	60	1-2%	"	SAB							.006							
																									15-25 FT. MINOR SILICIFICATION
4	20			DAMP			SAB	40	1-2%	"	SAB W/ BECOMING MOD. OR							.014						TR MAGN.	? DEADWOOD SH OR SILTST FRAGS.
5	25			DAMP			MOD. OR BR. W/ LT-MOD. GRY-BR	40-45	TR	WK	SAB			TR Py				.010						Py AS SMALL CUBES FILL OPENING & REPL. HB TR MAGN. Py IS DISSEM	
											MOD. FRAC. SURF.														
6	30			WET			LT. TO MOD. GRY W/ OR. VEIL, SOME GRN	35-40	NIL	WK	GOETHITE ? SURF. CONTAM			TR Py TR Pyr				.014						Py AS ABOVE — TR MAGN.	
											30-35% GOE AFT. Py													Py AS ABOVE — 1-3% GOE AFT. Py	
7	35			"			LT. TO DK GRY-TAN W/ OR-BROWN	25-30	"	WK	SAB MINOR GOE AFT. Py			TR Py 2% Pyr	32-72 FT. SHALE			.006						Py MOST AS HAIRLINE VEINS ON FRAC. & AS SM. BLEBS. TR. MAGN.	32-39 FT. DEADWOOD SH. SILTY SH — MOD TO DK GRY-GRN
											MOD FRAC. SURF.														
8	40			"			MOD. TO DK. GRY-GRN W/ OR-BR VEIN	15-20	"	WK	GOETHITE ? SURF. CONTAM			1% Py 2% Pyr	39-43 FT. HB DIO. PORPH			.004						TR MAGN. Py AS DISSEM - REPL. HB	39-43 FT. HB DIORITE PORPH.
9	45			"			LT. TO DK. GRY-GRN W/ MOD-DARK	25	"	WK	SAB		MOD. 2-4 FT.	1% Py 2% Pyr	48-72 FT. DEADWOOD SH.			.012						TR MAGN. Py OCCURS MAINLY IN HAIRLINE FRAC. AS VEINLETS MINOR BLEBS AND MINY FRAC. FILLING	43-72 FT. DEADWOOD SH. SILTY SH. — MOD TO DK GRY GRN FIS GRNR
10	50			"			DK TO MOD. GRY-GRN W/ MIN. OX & GOE	15-20	"	WK	VERY MIN. SURF. CONTAM			2-3% Py 2% Pyr				.010						Py AS ABOVE TR MAGN.	# 2 44 FT. BLEACHED SILICIFIED DEADWOOD SH. LT-MOD. GRY GRN

LACANA MINING INC: PROPERTY GILT EDGE

Sheet 2 of 6
Drill Hole # RGE-8

no.	Footage	Drill Rec.	Walls	Wetness	Min.	Color Dry	Color Washed	Washed Rec. %	Clay%	$CaCO_3$%	FeOx%	Vein Quartz	Silicification	Sulfide	Rock Type	Geology	Assayed	SILVER VALLEY OPT Au	Ag	Au	Ag	Au	Ag	REMARKS:	
11	55			WET ↓		WET ↓	DK TO MOD GRY-GRN	35-40	NIL	WK	VRY MIN SURF.? CONTAM			.5% Py	DEADWOOD SH. CONT.			.008						TR. MAGN.	DEADWOOD SH. CONT.
12	60						SAB	15	"	WK	SAB			.5-1% Py				.008						TR. MAGN	
13	65						SAB	60-65	"	WK	SAB		MIN.	2-3% Py				.008						Py AS VNLTS & SM. BLEBS FILL. OPEN SP TR. MAGN	MIN. BR. SH. FRAGS - MIN SILICIF. & OR HORNFELSED
14	70						SAB	40-45	"	WK TO MOD.	SAB			2-3% Py				.030						Py AS ABOVE TR MAGN	
															HB DIO + SH.										92-81 FT MIX OF HB DIO + DEADWOOD SH.
15	75						DK-LT. GRY-GRN	15	"	WK	SAB			2-4% Py				.050						Py DISSEM IN VNLTS & AS SM. BLEBS, + REPL. HB	MIX. OF HB DIO. PORPH & FN GRND DK GRY GRN SILTY SH W/ VRY MIN BR FRAGS
																			70-165' .059		65'-170'				
16	80						DK-MOD GRY GRN W/ MIN LT GRY GRN	25-35	"	WK TO MOD	SAB			2-4% Py TR. PyR				.072			.056			Py AS ABOVE	
															DEADWOOD SILTY SH.				70-95 .055					Py AS FRAC. FILL IN VNLTS W/ MIN. SM. BLEBS — SM-MED BLEBS IN HB DIO FRAGS - Lg % IN HB DIO FRAGS	81-95 FT. DEADWOOD FM. SILT SH. W/ VRY MINOR HB DIO FRAGS.
17	85						MOD. TO DK. GRY-GRN W/ MIN BR-GRY	40-50	"	WK TO MOD	SAB MIN BR FN FRAG			2-3% Py TR. PyR				.038						TR MAGN	
18	90						SAB	30-40	"	WK TO MOD	VRY MIN SURF. CONTAM			1% Py				.012						Py AS ABOVE TR MAGN	
19	95						SAB	30-40	"	WK. TO MOD	NIL		MIN	7-10% Py				.102						Py ALONG FRAC. FRAC. % INCR. Lg BLEBS OCCUR IN WIDER FRAC. 1-3 MM TR. MAGN	MIN. BLEACHING & SILICIFICATION
															HB DIO. PORPH									Py 2-3% IN HB DISS. AS HB REPL, VNLTS AS FRAC. FILL + OPEN SP BLEBS 1-3 MM	95-103 FT. HB DIORITE PORPH.
20	100						LT-MOD GRY-GRN W/ MIN DK GRY GRN	60-65	"	WK TO MOD	VRY MIN SURF.? CONTAM			2-3% Py				.044	X					TR. MAGN	
														2-3% Py										Py AS ABOVE	
21	105						LT-DK GRY GRN W/ MIN BR	35-40	"	WK TO MOD	SAB		MIN	2-3% Py	DEADWOOD SH			.036						Py AS ABOVE TR MAGN Py IN SH. PREDOM SH VNLTS FRAC. FILL	103- DEADWOOD SH
																								≈103 SLT. OXID. Py	MOD. TO DK GRY GRN W/ MIN BR FRAGS - ≈ SILTY SH
22	110						MOD TO DK GRY GRN W/ MIN BR	35-45	"	VRY WK.	SAB		MIN	.5-1% Py TR PyR				.026							*103-111 ABNT BR CHIPS IBR SH. FM.
23	115						MOD TO DK GRY GRN & BR	20-25	"	WK	NIL		MIN	≈.5%				.018							

LACANA MINING INC: PROPERTY GILT EDGE

Sheet 3 of 6
Drill Hole # AGE-6

no.	Footage	Drill Rec.	Walls	Wetness	Min.	Color Dry	Color Washed	Washed Rec. %	Clay%	$CaCO_3$%	FeOx%	Vein Quartz	Silicification	Sulfide	Rock Type	Geology	Assayed	SILVER VALLEY OPT Au	Ag	Au	Ag	Au	Ag	REMARKS:	
24	120'			WET ↓		WET ↓	LT TO MOD GRY-GRN	25-30	NIL	WK	NIL		MIN	0-3% fg Py Tr. Pyr	DEADWOOD Fm. CONT			.096	—					Py DISSEM IN Sh BLEBS <1mm - FREQUENT. Py AS VNLETS <1mm AS TR PYRITE FRAG. FILL	DEADWOOD Sh. CONT
																									LOCALIZED BLEACHED & SILICIFIED FRAGS OCCUR W/ OX Py VENLETS
25	125		"				DK-MOD GRY-GRN W/ MIN. BR	55-65	"	WK	"		MIN	1% Py Tr. Pyr				.076						Py AS ABOVE - SOME VNLETS OX. TR MAGN.	THROUGHOUT ENTIRE INTERVAL 103 - Fr.
26	130		"				DK-MOD GRY GRN W/ MIN BR	60-70	"	WK	"		MIN	1-2% Py				.078						Py AS ABOVE TR MAGN.	
27	135		"				SAB	50-60	"	WK	"		MIN	1-3% Py				.040						Py AS ABOVE TR MAGN.	
28	140		"				DK-MOD GRY GRN W/ CHOC BR	50-60	"	WK	"		MIN	2-4% fg Py 1% BR				.016						Py AS ABOVE W/ MODERATE Lgr. BLEBS & OPEN Sh. FILL BLEBS UP TO 2mm	MIN. BR. CHIPS <20%
															141' DIORITE	DIORITE								141' Pyrite w/ Fluorite & pyrrhotite diss & frags. fill fracs.	141'-145' HORNBLENDE DIORITE PORPH.
29	145		"				Md GY	65	"	3-5	"			± Py 3-5	145' SHALE			.048						140-170' $CaCO_3$ as veinlets (.1-.2mm) and diss (in Thdp) w/ Pyrite - generally as a rim around FeS_2 where diss.	145' Md. GY w/ DK GY specs & VLT GY Feldspar 145-147 DEADWOOD Fm. (?)
															DIORITE	DIORITE									147' GY-GRN & BRN Shale
30	150		"				Md GY to DK BRN	55	"	2-3	"			3-5				.046							147'-159' HORNBLENDE DIORITE PORPH. Md GY to GY GRN w/ 5-10% V. lt. GY 1 to 4mm Feldspar phenos and no hornblende phenos. Hbl replaced by Pyrite + Pyrrhotite + $CaCO_3$ ± Qtz.
31	155		"				Md GY	55	"	3-5	"			3-5				.120							
32	160		"				Md GY-BRN	45	"	2-3	"			2-4	159' Shale DK BRN	DEADWOOD FM. (?)		.080						159'	159'-189' DEADWOOD FM. (?)
33	165		"				Md Brn	46	"	1-2	"			5-10				.120	—					PY CONC. IN QTZITES & INTERBED T.S. IN LT. GY UNIT @ 25%	159'-185' Mostly Md to DK BRN Shale w/ fissile to thin Bdd w/ minor v. lt. GY to Md GY-GRN int bdd shale (approx. 159-162')
34	170		"				DK BRN	50	"	1-2	tr.	3	LT-MOD	5				.036	—					165-186' Tr. of lt to md ORG-BRN Felp on bedding surfaces & frac.	
35	175		"				DK BRN to ORG-BRN	55	"	nil	1/2		LT	1-3				.008							
36	180		"				DK BRN to lt ORG-BRN	75	"	"	1/2			1-2				.010						PY ON FRT AS SULF VNLETS OCC. W/ V NARR. QTZ VNLETS	

LACANA MINING INC: PROPERTY Gilt Edge

Sheet 4 of 6
Drill Hole # RGE-8

no.	Footage	Drill Rec.	Walls	Wetness	Min.	Color Dry	Color Washed	Washed Rec.	Clays	$CaCO_3$	FeOx	Vein Quartz	Silicification	Sulfide % Pyrite	Rock Type	Geology	Assayed	SILVER VALLEY OPT Au	SILVER VALLEY OPT Ag	SHMC OPT FIRE Au	SHMC OPT FIRE Au/Ag	Au	Ag	REMARKS:	
37	185			wet		Wet ↓	Dk GY-GRN to DK BRN	70	nil	nil	tr.			/	Shale	DEADWOOD Fm. (E)		.012							159-189' DEADWOOD FM. (E) Dk GRN-GY V. Fn. GRN
38	190			"			Md GY-GRN	85	"	3-5	nil			1-3	189' DIORITE	DIORITE		.030	—					185-189' $CaCO_3$ as Md to Dk GRN limey shle or V. Fn GRN ss. 189'-200' $CaCO_3$ in .1-2mm veinlets and diss rims around FeS_2.	189' 189'-199' HORNBLENDE DIORITE PORPH.
39	195			"			Md GY	65	"	3-5	"			1-3				.006		15'	.027				
40	200			"			Md to Dk GY-GRN	70	"	3-5	"			1-3 PYR 5-10	199' Shale	DEADWOOD Fm. (E)		.044	—					199' MINOR MAGN. V. FN. GRN PYR AS REPL. IN MASS. CAVITIES PY IN VNLTS ON FCT	199-207 (E) DEADWOOD FM.
41	205			"			Dk GY-GRN	90	"	nil	"	≤/		3-5				.012							
42	210			"			Md GY-GRN to lt GRN	90	"	tr.	"		MOD W/ SCALES	1-3	207' DIORITE	DIORITE		.010						207' 205-265' $CaCO_3$ in fracs w/ FeS_2 (.1-2mm) and diss in Thdp as rims around FeS_2 - only a few minor limey beds (215-235).	207-215' HORNBLENDE DIORITE PORPH.
43	215			"			Md GY-GRN	70	"	tr.	VERY LITE			≤/ PYR 3-5	215'	DEADWOOD FM. (E)		.012							215' 215'-233' DEADWOOD FM. (E)
44	220			"			Dk GY-GRN to DK BRN	80	"	tr.	"			1 PYR 1-3				.012						PYR AS FN GRN REPL. OF SHALE BEDS; PY AS SULF VNLTS W/ MIN. DISS., MED. GRN	
45	225			"			Dk GRN-GY	75	"	tr.	"		V. LITE	5-10 PYR 1-3				.028	—						
46	230			"			DK-GY	85	"	tr.	"			5-10 PYR 2-5				.036		10'	.032				
47	235			"			Md GY-GRN	70	"	1-2	"			≤/ PYR 1-3	233' DIORITE	DIORITE		.024	Ag .03	.01	.015		.017	233'	233'-256' HORNBLENDE DIORITE PORPH
48	240			"			lt GY-GRN	65	"	1-2	"	/		2-4				.010	Ag .02	.01	.01		.010	PY ON FCT w/ 1% DISSEMIN.	FN-MED GRN, MED GY-GRN
49	245			"			Md GY-GRN.	70	"	2-3	tr.			2-4				.014	Nil	.015	.015		.015	240-265' Tr. FeOx on Frac. faces	

LACANA MINING INC: PROPERTY GILT EDGE

Sheet 5 of 6
Drill Hole # RGE-8

no.	Footage	Drill Rec.	Walls	Wetness	Min.	Color Dry	Color Washed	Washed Rec.	Clays	$CaCO_3$	FeOx3	Vein Quartz	Silicification	Sulfide %	Rock Type	Geology	Assayed	SILVER VALLEY OPT Au	SILVER VALLEY OPT Ag	SHMC OPT FIRE Au	SHMC OPT FIRE Ag	Au	Ag	REMARKS:	
50	250			Wet		Wet ↓	md GY-GRN	70	nil	3-5	tr.			1-3	DIORITE	DIORITE		.004	.02	.02	.015		.012	PY MOSTLY DISSEM. MIN. SULF. VNLTS	233-256 HORNBLENDE DIORITE PORPH. MD GRN-GY, FN-MED GRNED
51	255			"			md to Dk GY-GRN	65	"	3-5	tr.			1-2				.006	.05	.01	.015		.006		
															256'	DEADWOOD FM. (E)								256'	256' - 323' DEADWOOD FM (E)
52	260			"			Dk GRN-GY	75	"	1-2	nil			5-10	259' Quartzite			.008	Nil	.01	.005		.009	IN SHALE, SULF VNLTS w/ MINOR DISSEM.	256-260 MED. TO DK GRN SHALE
53	265			"			md GY	70	"	tr.	"			10-15				.012	.01	.005	.01		.009	PY ON MOST FCT FACES AS NARROW SULF. VNLTS	260-269' Lt to Md. GY; QTZITE
54	270			"			md GY-BRN	55	"	nil	tr.			3-5				.012	.11	.01	.005		.011		
															DIRTY QTZITE										269'-287' MED-GY TO BLACK QTZITE INCR IN CARBONACEOUS MATT. NON-MAGNETIC
55	275			"			md BRN	80	"	"	tr			2-3				.004	Nil	.005	.005		.005	265-275' Tr. of FeOx (Lt. yell.-BRN) on frac. faces.	
56	280			"			Dk BRN	35	"	"	nil			<1				.004						PY ON FCT	
57	285			"			md GY	75	"	"	"			/				.002							
															Quartzite										287'-320' LT GRAY, FN-MED GRNED QTZITE - 99% QTZ
58	290			"			Lt GY	30	"	"	tr.			1-3				.006						285-305' Tr. of FeOx (Lt ORG-BRN) on frac. faces.	
59	295			"			Lt GY	20	"	"	"			/				.004							
60	300			"			Lt GY	15	"	"	"			<1				.006							
61	305			"			Lt GY	40	"	"	"			/				.006							
62	310			"			Lt GY	25	"	"	nil			/				.008							

LACANA MINING INC: PROPERTY GILT EDGE

Sheet 6 of 6
Drill Hole # RGE-8

no.	Footage	Drill Rec.	Walls	Wetness	Min.	Color Dry	Color Washed	Washed Rec. %	Clays	$CaCO_3$	FeOx	Vein Quartz	Silicification	Sulfide % Pyrite	Rock Type	Geology	Assayed	SILVER VALLEY OPT Au	Ag	Au	Ag	Au	Ag	REMARKS:	
63	315			wet		wet ↓	Lt GY	40	nil	nil	nil	TR		1-2	Quartzite	DEADWOOD Fm. (E)		.010						PY ON FCT AND MINOR DISSEM.	256'-323' DEADWOOD Fm. (E)
64	320			"			Lt. GY	10	"	"	"			1-2				.014							
															323'									323'	
65	325			"			Dk GY	75	"	"	"			2-4	MAGNETITIC SHALE	PE ?		.010						PY ON FCT AS SULF. VNLTS.	BLACK SHALE(?)
66	330			"			Dk GY	55	"	"	"			1-2				.010							BLACK, V. FN. GRN, FISSILE; MOST BEDS HIGHLY MAGNETIC;
67	335			"			Dk GY	75	"	tr.	"			1-2				.008						Tr. $CaCO_3$ on 1-1mm fracs w/ FeS_2 (330-335')	
68	340			"			Md-Dk GY-BRN	60	"	"	"			1-2				.012							
69	345			"			Dk GY	70	"	"	"			3-5				.016						340'-345' INCR. PY ON FCT	
70	350			"			Md to Dk GY	60	"	"	"			1				.012							
																									E.O.H. @ 350'

Contractor: Taylor Drlg - Conway
Coordinates: N 50613.0239 E 24585.7643
Project: Gilt Edge
Hole No.: BED-4
Drill Type: Porta Drill Rotary
Casing Depth:
State: South Dakota
Sheet 1 of 9
Hole Size: 8"
Bearing: Inclination: 0°
Date Started: 11-7-87
Property: HARLAN SCHMIDT
Collar Elev.: 5387.5
Final Depth: 305
Date Completed: 11-11-87
Hole Surveyed:

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK TYPE & STRUCTURE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	ROCK TYPE	GEOLOGIC NOTES: DESCRIPTION (MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE)	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinlill, Replacement)	TYPE
0						dry soils small gravels			
5						moist brown clays	Plastic, bally		
10						alluvium is weathered Hornblend Trachyetes	making water just at base of clay zone		
15						most probably	several zones of braided channel-like deposits in the alluvium; going from fine down to coarse, back to fine then coarse again fines include clays		
20							May be fault zone or shear zone		
25							As Above		
30							As Above		
35									

DRILL CUTTING LOG

Logged by: MARTIN ELMORE - ENGEO TECH

Contractor: Taylor Drlg - Conway
Drill Type: Porta Drill - air hammer
Hole Size: 8"
Collar Elev.:
Coordinates:
Casing Depth:
Bearing: Inclination: 0°
Final Depth: 305
Project: Gilt Edge
State: South Dakota
Date Started: 11-9-87
Date Completed: 11-11-87
Hole No.: BED-4
Sheet 2 of 9
Property:
Hole Surveyed:

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK TYPE & STRUCTURE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	ROCK TYPE	GEOLOGIC NOTES: DESCRIPTION (MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE)	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinlill, Replacement)	TYPE
35					35	Hornblend Trachyete			
40					40		Lite gray - few fresh chips		
							50% fresh		
45					45		90% fresh lt. gray with black inclusions (feldspars or Hornblend) fractured - surfaces show much fine grained pyrite		
50					50		As Above		
55					55		As Above		
60					60		Lt. gray - very lite green transparent vugs within porphyry - still black inclusions - fair pyrite coating on fracture surfaces		
65					65		As Above		
70									

DRILL CUTTING LOG

Logged by: MARTIN ELMORE

Contractor: Taylor Drlg - Conway | Coordinates: | Project: Gilt Edge | Hole No.: BED-4

Drill Type: Porta Drill Rotary - Air hammer | Casing Depth: | State: South Dakota | Sheet 3 of 9

Hole Size: 8" | Bearing: | Inclination: 0° | Date Started: 11-7-87 | Property:

Collar Elev.: | Final Depth: 305 | Date Completed: 11-11-87 | Hole Surveyed:

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK TYPE & STRUCTURE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	GEOLOGIC NOTES: ROCK TYPE	DESCRIPTION: MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinfill, Replacement) / TYPE
70				70		Hornblend Trachyte	As Above	Note: Making water @ ≈ 8-9 GPM - some leaking from alluvium under casing
							some in-situ oxidation on fracture surfaces; little pyrite visible	
75				75			As Above Lt. gray - slightly greenish tint good increase of pyrite on fractures	
80				80				
				81		porphyry	some quartz inclusions (white, cloudy) much pyrite - black feldspars -	
85				85		Porphyry	drill rate ≈ 3 min/ft. As Above	
				88		Hornfels	- Med-green Hornfels - colloidial fractures - no inclusions	
90				90		Hornfels	As Above Lt green to dk green varigated no pyrite, no fractures	
95				95			As Above	
100				100		Hornfels	As Above much darker, pyrite on darker chips; some oxidation on chips	
105								

DRILL CUTTING LOG

Logged by: MARTIN ELMORE

Contractor: Taylor Drlg - Conway | Coordinates: | Project: Gilt Edge | Hole No.: BED-4

Drill Type: Porta-Drill - air hammer | Casing Depth: | State: South Dakota | Sheet 4 of 9

Hole Size: 8" | Bearing: | Inclination: 0° | Date Started: 11-7-87 | Property:

Collar Elev.: | Final Depth: 305 | Date Completed: 11-11-87 | Hole Surveyed:

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES % (vol %)	ROCK TYPE & STRUCTURE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	GEOLOGIC NOTES: ROCK TYPE	DESCRIPTION: MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinfill, Replacement)	TYPE
105				105		Hornfels	Lt. green to dark green varigated		
							Heavy oxidation is probably from up-hole during bit-trip. - very little pyrite		
110				110			As Above		
							Lt green - dk green ; med gray-brown (40%) varigated - no fractures		
115				115			As Above		
							Gray-brown now 50%+ of sample no fractures - no pyrite		
120				120			As Above		
							some very Lt. green chips - no pyrite		
125				124		Hornblend	Lt. gray-green with quartz and		
				125		Trachyte	Hornblend inclusions		
130				130			As Above		
135				134		Hornfels	Lt. to dk green - some pyrite but very		
				135			small fragments are being returned		
				138		Porphyry ?	Lt green - black inclusions (feldspar ?) some pyrite		
140									

DRILL CUTTING LOG

Logged by: MARTIN ELMORE

Contractor Taylor Drlg - Conway | Coordinates | Project Gilt Edge | Hole No. BED-4

Drill Type Porta Drill - air hammer | Casing Depth | State South Dakota | Sheet 5 of 9

Hole Size 8" | Bearing | Inclination 0° | Date Started 11-7-87 | Property

Collar Elev. | Final Depth 305 | Date Completed 11-11-87 | Hole Surveyed

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK TYPE & STRUCTURE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	GEOLOGIC NOTES: ROCK TYPE	DESCRIPTION: MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinfill, Replacement)	TYPE
140				140		porphyry	Lt. Green - black inclusions (feldspars?) Some pyrite		
				143		Hornfels	Varigated Lt. to dk. green, med gray-brown		
145				145			50%+ gray-brown		
							grading		
150							to almost 100% Lt. Green at 150'		
				150					
				152		Porphyry	Lt. Green, black inclusions (feldspars?) at 152'		
155				155					
				158		Hornfels	Med gray-brown		
160				160					
							As Above		
165							more Lt. Green		
				165					
				168		porphyry	1+ foot porphyry - Lt Green (Feldspars?)		
170				170		Hornfels	Varigated Lt - med green; med gray-brown		
175									

DRILL CUTTING LOG

Logged by: MARTIN ELMORE